

towards the throat. Upper side of tail rufous russet, the anterior portion blotched with indistinct dark spots. Under side of tail tawny russet.

Skull smaller and with much smaller auditory bullæ, the greatest length of the bullæ being only 11.5 mm., while in *F. fossa* they measure 15 mm. in length.

Dimensions of the type (measured in skin):—

Head and body 480 mm.; tail 265; hind foot 78; ear 32.

Skull: greatest length 93; zygomatic breadth 43; greatest length of nasals 23; length of upper tooth-row, from front of first premolar to back of last molar, 31.5.

Hab. Ambohitombo, near Ambositra, Central Madagascar.

Type. Immature male. B.M. no. 97. 9. 1. 115. Original no. 167. Collected 22 January, 1895, by Dr. C. I. Forsyth Major.

The continuous dorsal and lateral stripes, together with the more rufous colouring of the back and the much smaller auditory bullæ, indicate that this form must be considered quite distinct from *F. fossa*. I propose to call it *F. majori*, after Dr. C. I. Forsyth Major, who collected the specimen during his famous expedition in Madagascar in 1895.

BIBLIOGRAPHICAL NOTICES.

Catalogue of the Fresh-water Fishes of Africa in the British Museum (Natural History). Vol. I. By G. A. BOULENGER, F.R.S. London: Printed by Order of the Trustees, 1909.

It is expected that not less than three volumes will be required to complete the 'Catalogue of the Fresh-water Fishes of Africa,' to which subject Mr. Boulenger has devoted many years of study. The present volume contains an account of the Selachii, Crossopterygii, and Dipneusti, and of the Teleostean suborder Malacopterygii and part of the Ostariophysii.

That the time is ripe for the appearance of such a Catalogue as this admits of no question, for during the past decade an enormous increase in our knowledge of the Fresh-water Fishes of Africa has been made, and types of most of the large number of new generic and specific forms are deposited in the British Museum. Nearly every species described in this volume is figured, and some of these figures, as in the case of the Mormyridæ, are remarkable for the high degree of specialization which they indicate, especially in regard to feeding-habits.

Though larval forms are occasionally referred to, in no case are these figured; yet we venture to think that such figures would have added not a little to the value of this work. Similarly, it has been

the custom, in other catalogues of the kind, to give figures of anatomical characters used as a basis of classification in the volume; but no such aids are included in Mr. Boulenger's present volume—a fact which is surely to be regretted.

The figures which adorn these pages have for the most part appeared already in Mr. Boulenger's 'Matériaux pour la Faune du Congo,' wherein they appeared in the form of lithographs, and very beautiful examples of their kind. But it is impossible to reproduce such illustrations successfully by photography, and the attempt to achieve this in the volume now before us it must be admitted fails completely.

A Treatise on Zoology. Edited by Sir RAY LANKESTER, K.C.B., M.D., LL.D., F.R.S.—Part IX. *Vertebrata Craniata* (First Fascicle: *Cyclostomes and Fishes*). By E. S. GOODRICH, M.A., F.R.S. London: Adam and Charles Black. 1909.

THIS scholarly work is making a most gratifying progress, and the present volume most unquestionably maintains the high and dignified standard which the earlier volumes led us to expect. Mr. Goodrich has long since earned the reputation of one of the ablest morphologists in this country, and his work in these pages in every way sustains this reputation. He has given us the last word on the anatomy of the Cyclostomes and Fishes, for he has not only brought together all that has been done by other workers, but he has added much thereto of his own. On every page we find proof of laborious research and a singularly well-balanced judgment as to what is essential. It is a book for the advanced student, highly technical, much condensed, but throughout clear and to the point. It forms, in short, a solid, well-planned foundation on which to base the remaining volumes on the Vertebrates.

He traces, in lucid fashion, the evolution both of the exo- and endoskeleton, and the relation thereto of the segmentation of the body—themes which are singularly difficult to handle, and are rarely successfully carried through when attempted. In no other work of the kind will there be found so clear or so thorough an account of the genital ducts or of the vascular and nervous systems, while his treatment of the paired and median fins and of the cranial and axial skeleton is most admirable.

Here and there, perhaps, there is room for criticism. Thus it seems to us that the classification is rather over-elaborate, while we notice one or two omissions. Thus we have failed to find any account of the quite remarkable vertebræ of the sword-fishes, or of the annual increments of scale-growth or of scale-ecdysis; and we venture to think that larval forms might well have received more attention than has been given them. These, however, are not very serious omissions, and may even have been deliberate on the part of the author.

It is a work, in short, which will long remain the standard of its kind.